

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/09701

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F16K31/04 F16K31/528 E21B34/04 E21B33/035 H02K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16K E21B H02K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 36 07 899 A (SIEMENS AG) 1 October 1987 (1987-10-01)	1-8, 11-15, 17,18, 21-23
Y	column 2, line 7 - line 68	9,10,16, 19,20
Y	US 5 370 011 A (HAMMES KARL ET AL) 6 December 1994 (1994-12-06) column 4, line 23 - line 45 column 5, line 29 - line 33	9,10,16
Y	US 3 998 108 A (VYSKOCIL JIRI) 21 December 1976 (1976-12-21) column 2, line 19 - line 22	19,20
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *G* document member of the same patent family

Date of the actual completion of the international search

20 January 2004

Date of mailing of the international search report

30/01/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 305 762 A (SIEMENS AG) 8 March 1989 (1989-03-08) abstract	1
A	US 2002/011580 A1 (MAGNUS HEYN HALFDAN ET AL) 31 January 2002 (2002-01-31) the whole document	1

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Information on patent family members

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